

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
	Feet			Feet	
White: Decker, Ind.	18	21	(?)	25.8	Mar. 27
White, East Fork:					
Seymour, Ind.	10	21	24	13.8	22
Williams, Ind.	10	23	27	15.8	25
Shoals, Ind.	20	23	28	26.6	26
White, West Fork:					
Anderson, Ind.	12	20	22	17.5	21
Noblesville, Ind.	14	20	22	18.1	21
Indianapolis, Ind.	18	21	22	19.2	21
Elliston, Ind.	19	19	27	28.1	23
Edwardsport, Ind.	15	20	29	20.0	24
Cumberland:					
Nashville, Tenn.	40	14	14	40.0	14
Clarksville, Tenn.	46	13	17	51.1	15
Lock F, Eddyville, Ky.	57	16	23	58.8	18
Tennessee:					
Widows Bar Dam, Ala.	26	(1)	(3)	20.7	Feb. 27
		10	13	29.0	Mar. 12
Florence, Ala.	18	12	15	23.9	13
Riverton, Ala.	33	1	3	33.7	2
		11	19	44.3	14
Savannah, Tenn.	40	14	18	43.0	15
Johnsonville, Tenn.	31	14	22	36.3	16
Elk: Fayetteville, Tenn.	14	9	9	15.4	9
Mississippi:					
Hannibal, Mo.	13	31	(?)		
Louisiana, Mo.	12	21	23	12.9	22
Grafton, Ill.	18	21	25	19.7	22
Alton, Ill.	21	21	25	22.9	22
Cape Girardeau, Mo.	30	21	28	33.3	24
New Madrid, Mo.	34	17	(?)	40.4	25-26
Cottonwood Point, Mo.	34	20	(?)	37.6	27
Memphis, Tenn.	35	18	(?)	41.4	30
Helena, Ark.	44	20	(?)		
Arkansas City, Ark.	48	(1)	1	51.8	Feb. 17-19
		21	(?)		
Greenville, Miss.	42	24	(?)		
Vicksburg, Miss.	45	(1)	(?)		
Natchez, Miss.	46	(1)	(?)		
Angola, La.	45	(1)	(?)		
Baton Rouge, La.	35	(1)	(?)		
Donaldsonville, La.	28	(1)	(?)		
New Orleans, La.	17	(1)	(?)		
Spirit: Tomahawk, Wis.	14	18	18	14.7	Mar. 18
Illinois:					
Morris, Ill.	13	22	25	13.8	23-24
Peru, Ill.	14	(1)	(?)	18.3	26
Henry, Ill.	10	(1)	5	16.1	Feb. 9
		13	(?)	13.0	Mar. 26-27
Peoria, Ill.	18	19	(?)	19.8	27
Havana, Ill.	14	(1)	(?)	18.0	28-30
Beadstown, Ill.	14	(1)	(?)	20.5	28-29
Pearl, Ill.	12	(1)	(?)	18.0	22
Meramec:					
Pacific, Mo.	11	20	23	15.8	22
Valley Park, Mo.	14	20	23	17.0	23
Bourbeuse: Union, Mo.	12	21	22	13.7	22
Missouri: St. Charles, Mo.	25	21	21	25.3	21
Osage:					
Osceola, Mo.	20	21	23	21.4	22
Warsaw, Mo.	22	20	25	25.6	22
Tusculum, Mo.	25	19	27	32.4	23
Arkansas: Yancopin, Ark.	29	(1)	(?)		
Neosho: Oswego, Kans.	17	20	22	20.1	21
Petit Jean: Danville, Ark.	20	19	23	24.1	20
White:					
Batesville, Ark.	23	18	18	23.8	18
Georgetown, Ark.	22	22	31	22.9	26-27
Black:					
Poplar Bluff, Mo.	14	19	22	14.8	19
Corning, Ark.	11	14	(?)	13.6	23
Black Rock, Ark.	14	18	(?)	19.9	21-22
Cache: Patterson, Ark.	9	21	(?)	10.5	27
Yazoo: Yazoo City, Miss.	25	(1)	(?)		
Tallahatchie: Swan Lake, Miss.	25	(1)	7	31.1	Jan. 7-9
		10	(?)	31.8	Mar. 22
Sulphur:					
Ringo Crossing, Tex.	20	1	5	26.3	2
		8	13	23.9	9
Finley, Tex.	24	4	18	27.4	11
Cypress: Jefferson, Tex.	18	14	16	19.2	15
Ouachita:					
Arkadelphia, Ark.	18	8	8	18.6	8
Camden, Ark.	30	10	17	35.0	12
Monroe, La.	40	20	(?)		
Atchafalaya: Melville, La.	37	(1)	(?)		
WEST GULF DRAINAGE					
Sabine: Logansport, La.	25	14	18	25.8	16
		24	30	26.9	26
Trinity:					
Dallas, Tex.	25	2	5	30.5	3
		7	11	31.6	9
Trinidad, Tex.	28	5	18	37.0	13
Long Lake, Tex.	40	17	19	40.4	18
Liberty, Tex.	25	12	18	26.0	13-15
		22	30	26.8	27-28
Trinity, Elm Fork: Carrollton, Tex.	7	2	2	7.8	2

¹ Continued from last month.

² Continued at end of month.

³ Below flood stage at 8 a. m., Mar. 1.

MEAN LAKE LEVELS DURING MARCH, 1927

By UNITED STATES LAKE SURVEY

[Detroit, Mich., April 4, 1927]

The following data are reported in the Notice to Mariners of the above date:

Data	Lakes ¹			
	Superior	Michigan and Huron	Erie	Ontario
Mean level during March, 1927:				
Above mean sea level at New York	Feet 601.31	Feet 578.48	Feet 571.10	Feet 245.71
Above or below—				
Mean stage of February, 1927	-0.01	+0.23	+0.13	+0.40
Mean stage of March, 1926	+1.12	+0.94	+1.08	+1.87
Average stage for March, last 10 years	-0.07	-1.04	-0.28	+0.44
Highest recorded March stage	-1.01	-4.47	-2.75	-2.10
Lowest recorded March stage	+1.12	+0.94	+1.08	+1.87
Average departure (since 1860) of the March level from the February level	-0.10	+0.15	+0.18	+0.26

¹ Lake St. Clair's level: In March, 1927, 573.17 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, MARCH, 1927

By J. B. KINCER

General summary.—Precipitation was rather frequent during the first decade over the East and Southeast, attending the passage of several storm areas, but following these much colder weather overspread these sections, with freezing temperatures extending to the east Gulf coast. Temperature changes were not marked in the western part and precipitation was largely of a local character. Widespread rain or snow occurred in the Southwest during the second decade, with general rains throughout the interior. It was rather warm for the season in the East about the 18th, with widely scattered stations reporting the highest temperatures of record for so early in the spring. At the same time it was considerably cooler over western districts, with a marked fall in temperature over the Southwest on the 20th. A reaction to cooler set in over eastern sections during the last week, and in western States the tendency was still to rather low readings, although conditions were more seasonable. Precipitation was rather frequent during the latter part of the month over the central valleys and the lake region, and during the last week general rain or snow occurred over northern areas east of the upper Mississippi Valley.

The frost and freezing temperatures that overspread the Southeastern States early in the month, while not unusual for the season, caused considerable damage to early fruit bloom, and some harm resulted to tender vegetation. The frequent rainfall and cold weather made conditions rather unfavorable for field work in much of the South, and plowing and planting were not very active. Some cotton was planted in the southwestern part of the belt and a little corn was put in as far north as southeastern Oklahoma, but in much of the interior valleys the soil continued mostly too wet for field operations. Fruits continued their unseasonable advance, with the earlier varieties blooming as far north as southern Missouri and the lower Ohio Valley.

Much interruption to field work was reported during the second decade, although conditions became more favorable toward the close, with preparations for planting in the Cotton Belt advancing fairly well, but in portions of the Northwest it remained too wet. Except

where the soil continued too wet from previous heavy rains, preparations for spring work made good progress in most areas during the last decade, and seasonal operations were well advanced in the Atlantic Coast States, the South, and the Great Plains, with some potatoes put in as far north as Long Island and considerable oats seeded northward to southern Nebraska.

Small grains.—In the western Wheat Belt rain and melting snow furnished abundant moisture during the first part of the month and the crop made satisfactory progress generally, except in some west-central Plains sections. Some late-sown grain was in poor condition locally in the Ohio Valley, but rains and snows during the second week were favorable over the Great Plains region, while cereal crops made good advance in the South. Winter grains made material growth during the last decade and soil conditions were very satisfactory, due to abundant precipitation. In parts of the Ohio Valley, however, the soil on lowlands had been too wet and there was some local complaint of yellowing. Oat seeding made slow advance in the central valleys, due to wet soil, but considerable oats had been seeded to southern Nebraska at the close of the month.

Ranges, pastures, and livestock.—Pastures made good progress in the South during the month, and at its close grass was greening to the central portions of the country. Livestock continued to range freely over the northern Great Plains, with a consequent saving of feed. Precipitation over western grazing districts was very beneficial for the range, but caused some suffering of livestock during the last half. The weather was mostly favorable for lambing the latter part of the month, but previous conditions had caused some suffering.

Miscellaneous crops.—The frost that overspread the Southeast early in the month caused considerable damage to truck in Georgia and slighter injury elsewhere; protective measures saved a large acreage of truck in Florida. Potato planting advanced fairly well during the month and at the close was beginning on Long Island.

Although considerable injury to fruit was first reported, the harm, in general, was rather less than at first indicated. Fruit continued to advance considerably ahead of an average season, with early varieties blooming to the lower Ohio Valley, but the cooler weather the latter part of the month was favorable in checking too rapid progress.

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

March was an unusually stormy month over the greater part of the North Atlantic. Over the steamer lanes the excess of days with heavy weather was not confined to any particular region, but the number of days with gales was above the normal along nearly the entire route from New York to the British Isles, although the weather over the eastern part of the southern lane was somewhat less turbulent. Many of the disturbances were very severe, and winds of force 11 and 12 were not uncommon, as shown by storm reports in the table.

Fog was unusually prevalent along the American coast between Hatteras and Nova Scotia, where it was reported on from 8 to 12 days. The number of days with fog over the Grand Banks was considerably below the normal; it was observed on 3 days in the Gulf of Mexico, on 5 days in the square between the fortieth and forty-fifth parallels and the twentieth and twenty-fifth meridians, and on from 1 to 3 days in the vicinity of the British Isles, while the greater part of the steamer lanes was practically clear.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (seventy-fifth meridian), North Atlantic Ocean, March, 1927

Stations	Average pressure	Departure ¹	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>(°)</i>	<i>Inches</i>		<i>ches</i>	
Julianehaab, Greenland.....	29.42		29.93	9th.....	28.87	22d.
Belle Isle, Newfoundland.....	29.83	+0.03	30.30	25th.....	29.20	16th.
Halifax.....	30.05	+0.15	30.50	11th.....	29.82	9th.
Nantucket.....	30.08	+0.08	30.52	12th.....	29.56	8th.
Hatteras.....	30.13	+0.10	30.42	5th.....	29.22	2d.
Key West.....	30.10	+0.07	30.30	5th.....	29.04	22d. ⁴
New Orleans.....	30.12	+0.09	30.42	5d.....	29.92	9th.
Swan Island.....	29.94	-0.04	30.08	5th.....	29.88	13th. ⁴
Turks Island.....	30.12	+0.10	30.22	5th ⁴	30.00	3d.
Bermuda.....	30.15	+0.12	30.42	13th ⁴	29.56	3d.
Hotte, Azores.....	30.21	+0.09	30.64	4th.....	29.80	19th.
Lerwick, Shetland Islands.....	29.58	-0.12	30.34	13th.....	29.00	7th.
Valencia, Ireland.....	29.65	-0.25	30.30	12th.....	28.59	25th.
London.....	29.96	-0.22	30.36	15th.....	28.87	25th.

¹ From normals shown on H. O. Pilot Chart based on observations at Greenwich mean noon, or 7 a. m., seventy-fifth meridian.

² Mean of 22 observations; 9 days missing.

³ No normal established.

⁴ And on other dates.

On the 1st there was a shallow depression in the Gulf of Mexico that afterward developed into a severe disturbance as it moved northeastward along the American coast, as shown by Charts VIII to XI, that cover the period from the 2d to 5th, inclusive. These charts also give an idea of the disturbance over the eastern section of the ocean that was especially well developed on the 3d and 4th.

From the 6th to 14th there were few well-defined disturbances of any great extent or intensity, although during this period a number of vessels in various parts of the ocean reported gales, while moderate weather prevailed over large areas.

On the 15th an area of low pressure was over Newfoundland, and a second Low central near 50° N., 25° W. On the 16th the center of the western Low was near St. Johns, Newfoundland, and the eastern near 46° N., 18° W.; they had both increased in intensity, and westerly winds of force 9 to 11 prevailed over the region between the fortieth and sixtieth meridians, north of the fortieth parallel, while moderate to strong gales were also encountered east of the twentieth meridian. By the 17th the western Low was central near 47° N., 37° W., and the storm area extended from the thirty-fifth to the fiftieth parallel and the thirtieth to the fiftieth meridian. The eastern Low of the 16th had apparently moved eastward, gradually filling in, as on the 17th moderate weather prevailed east of the thirtieth meridian.

On the 18th the conditions were much the same as on the previous day although the storm area was somewhat less in extent.

On the 20th a depression of limited area was central near 44° N., and 40° W.; this moved slowly eastward, and on the 27th was off the north coast of Scotland. During this period gales were prevalent over the middle and eastern sections of the steamer lanes, the storm area varying from day to day in extent and intensity.

On the 24th a slight depression was in the vicinity of Bermuda; it moved northward, increasing in intensity, and on the 25th, when central near 37° N., 68° W.,